

WHAT IS CLAIMED IS:

1. A cream containing interferon encapsulated with liposome, comprising  
an interferon encapsulated with liposome, and  
a cream substrate.

2. The cream containing interferon encapsulated with liposome according to  
claim 1, wherein the content of interferon is  $1.0 \times 10^4$ -  $5 \times 10^8$  IU/g cream at the ratio of  
biological activity of interferon to weight of cream; the ratio of biological activity of  
interferon to weight of cream substrate is  $5 \times 10^3$ - $5 \times 10^6$  IU: 1g; and the ratio of  
biological activity of interferon encapsulated with liposome to total volume of  
liposome is  $1.0 \times 10^5$ -  $5 \times 10^8$  IU: 1 ml in the case of greater than 80% efficiency of  
encapsulation.

3. The cream containing interferon encapsulated with liposome according to  
claim 2, wherein the ratio of biological activity of interferon to the weight of cream  
substrate is  $5 \times 10^4$  IU: 1g.

4. The cream containing interferon encapsulated with liposome according to  
claim 1 or 2, wherein the liposome used for encapsulating interferon is made from the  
following components:

a membrane material, selected from the group consisting of phosphatidyl choline,  
soya lecithin, cephalin, lecithin, cholesterol, stearic amide and mixtures thereof; and  
an antioxidant agent.

5. The cream containing interferon encapsulated with liposome according to  
claim 4, wherein said liposome is made from the following components:

phosphatide	65-90 parts by weight
cholesterol	50-30 parts by weight
stearic amide	0.5-5 parts by weight and

vitamin E                      0.2-2 parts by weight.

6. The cream containing interferon encapsulated with liposome according to claim 5, wherein said liposome is made from the following components by weight:

5        phosphatide: cholesterol: stearic amide: vitamin E= 80: 18: 1: 1.

7. The cream containing interferon encapsulated with liposome according to claim 1 or 2, wherein said cream substrate comprising:

excipient                      200-300 parts by weight

10        emulsifier                    10-30 parts by weight

stabilizer                    5-25 parts by weight ; and

antiseptic                    0.5-1 parts by weight;

and wherein, said excipient is selected from the group consisting of glycerin, liquid paraffin, stearic acid, glyceryl monostearate, octadecyl alcohol, white Vaseline, yellow Vaseline, lanolin and mixtures thereof;

15        said emulsifier is selected from the group consisting of polysorbate 20, polysorbate 60, polysorbate 80, Span 80 and sodium dodecyl sulfate;

      said stabilizer is selected from the group consisting of mannitol, sucrose, maltose, dextran 40, trehalose, ethyl lactate and mixtures thereof; and

20        said antiseptic is selected from the group consisting of methyl p-hydroxybenzoate, ethyl p-hydroxy benzoate, propyl p-hydroxybenzoate and mixtures thereof.

8. The cream containing interferon encapsulated with liposome according to claim 7, wherein the emulsifier is polysorbate 80.

9. The cream containing interferon encapsulated with liposome according to claim 8, wherein the ratio of polysorbate 80 to cream substrate is 2.0%-5.0% by weight.

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10. The cream containing interferon encapsulated with liposome according to claim 9, wherein the cream substrate comprising:

white Vaseline: polysorbate 80: dexcran 40: ethyl lactate: ethyl p-hydroxy benzoate = 20: 20: 5: 3: 1: 1:0.1 by weight.

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11. The cream containing interferon encapsulated with liposome according to claim 1 or 2, wherein said interferon is natural IFN or recombinant human IFN- $\alpha$ ,  $\beta$  or  $\gamma$ .

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12. The cream containing interferon encapsulated with liposome according to claim 11, wherein said interferon is IFN  $\alpha$ -2a, IFN  $\alpha$ -1b or IFN  $\alpha$ -2b.